



EXCERPT FROM THE PROCEEDINGS

OF THE SEVENTH ANNUAL ACQUISITION RESEARCH SYMPOSIUM THURSDAY SESSIONS VOLUME II

**Acquisition Research
Creating Synergy for Informed Change
May 12 - 13, 2010**

Published: 30 April 2010

Approved for public release, distribution unlimited.

Prepared for: Naval Postgraduate School, Monterey, California 93943



Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE MAY 2010		2. REPORT TYPE		3. DATES COVERED 00-00-2010 to 00-00-2010	
4. TITLE AND SUBTITLE Compensation, Culture and Contracts: The Realities of the DoD's Blended Workforce				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Defense Acquisition University, 9820 Belvoir Road, Fort Belvoir, VA, 22060				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES 7th Annual Acquisition Research Symposium to be held May 12-13, 2010 in Monterey, California.					
14. ABSTRACT The Obama Administration's March 2009 mandate that the federal government rebuild its organic acquisition workforce, coupled with the recent repeal of the National Security Personnel System (NSPS), opens the curtain for a fresh look at Department of Defense (DoD) human capital management practices, particularly for employees in critical acquisition positions. Common perceptions hold that the DoD, given its relatively weak ability to provide economic rewards, sacrifices much of its best talent to private-sector employers. Driven in large part by this revolving door phenomenon, the DoD's acquisition workforce now consists of a rich blend of military, civilian, and contractor personnel, who deliver many basic acquisition competencies. This study synthesizes three quantitative analyses of compensation packages available to military, civilian and contractor personnel, with qualitative research on the less tangible incentives offered in each sector, to explore the DoD's competitive position in the recruitment and retention of high-caliber acquisition professionals. It finds that, although high-performing DoD civilians are at slight financial disadvantage, they can be motivated to stay in organizations in which a positive, mission-focused ethos prevails.					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 49	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

The research presented at the symposium was supported by the Acquisition Chair of the Graduate School of Business & Public Policy at the Naval Postgraduate School.

To request Defense Acquisition Research or to become a research sponsor, please contact:

NPS Acquisition Research Program
Attn: James B. Greene, RADM, USN, (Ret.)
Acquisition Chair
Graduate School of Business and Public Policy
Naval Postgraduate School
555 Dyer Road, Room 332
Monterey, CA 93943-5103
Tel: (831) 656-2092
Fax: (831) 656-2253
E-mail: jbgreene@nps.edu

Copies of the Acquisition Sponsored Research Reports may be printed from our website
www.acquisitionresearch.net



ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL

Compensation, Culture and Contracts: The Realities of the DoD's Blended Workforce

Kathy Loudin—Kathlyn Loudin has served on the Defense Acquisition University faculty since 2008. Previously, she led an acclaimed group of cost engineers at the Naval Surface Warfare Center, supporting Navy, Marine Corps, and other DoD programs. Loudin has acquisition experience within both the DoD and industry, holds an MPA, and is a PhD candidate at Virginia Tech. She has written for Contract Management, Defense Acquisition Review Journal, and Defense AT&L, and has presented at the Acquisition Research Symposium (2008), the American Society for Naval Engineers (2008), the Navy Cost Analysis Symposium (2009), and the DoD Cost Analysis Symposium (2010).

Abstract

The Obama Administration's March 2009 mandate that the federal government rebuild its organic acquisition workforce, coupled with the recent repeal of the National Security Personnel System (NSPS), opens the curtain for a fresh look at Department of Defense (DoD) human capital management practices, particularly for employees in critical acquisition positions. Common perceptions hold that the DoD, given its relatively weak ability to provide economic rewards, sacrifices much of its best talent to private-sector employers. Driven in large part by this revolving door phenomenon, the DoD's acquisition workforce now consists of a rich blend of military, civilian, and contractor personnel, who deliver many basic acquisition competencies.

This study synthesizes three quantitative analyses of compensation packages available to military, civilian and contractor personnel, with qualitative research on the less-tangible incentives offered in each sector, to explore the DoD's competitive position in the recruitment and retention of high-caliber acquisition professionals. It finds that, although high-performing DoD civilians are at slight financial disadvantage, they can be motivated to stay in organizations in which a positive, mission-focused ethos prevails.

Background: The Pay-for-Performance Debate

Several years ago, the *National Defense Authorization Act (NDAA)* for fiscal year (FY) 2004 amended Title 5 of the *US Code*, authorizing the Secretary of Defense to implement a new personnel system, known as National Security Personnel System (NSPS), to replace the long-standing General Schedule (GS) system. Heralded as a human capital management system that could boost organizational effectiveness by paying employees for exemplary performance, NSPS was gradually deployed throughout most of the DoD. Six years later, just as the later-adopting DoD organizations were pondering the results of their first NSPS review cycles, the FY 2010 *NDAA* further amended Title 5, effectively rolling back NSPS¹ and instituting an improved version of the General Schedule (GS) system, one that

¹ The *National Defense Authorization Act for 2010* (US Congress, 2010, HR 2647, Sect. 1113, pp. 309-315) calls for the cessation of NSPS no later than January 1, 2012. This legislation is available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h2647enr.txt.pdf



will eventually feature management flexibilities and workforce incentives crafted to attract and retain talented employees.

Mere months before the repeal of NSPS, in March 2009, President Obama published a memorandum² succinctly addressing the shortcomings of the government's acquisition system and directing the Office of Management and Budget (OMB) to work with Executive Agency and Department Heads to ensure both the capacity and the ability of their workforces to appropriately negotiate, manage and oversee acquisition programs. Within weeks, the DoD had constructed an action plan. This plan called for the addition of some 20,000 acquisition positions by 2015. Of this figure, approximately 11,000 would be converted from contractor positions to government positions; the other 9,000 would be new government positions (Hedgpath, 2009).

Against this exciting but perplexing backdrop, the DoD must balance dramatic demands for experienced, talented personnel, while at the same time reinvigorating the GS system. Some would argue that those two goals are in direct conflict: Many have pointed to the GS system as rewarding longevity (or time in service), rather than retaining the truly high performers. In fact, the main indictment of the GS system was that it failed to motivate strong performance and that it levied few consequences for poor performance. Given that public organizations strive to treat employees equitably, agencies cannot reward stellar performance much more handsomely than they reward mediocre performance. According to James (2002), the GS system has traditionally supported internal equity, but not external (i.e., market-based) equity. Other Office of Personnel Management (OPM) studies have found that 75% of pay increases have been unrelated to performance (Asch, 2005). Administration of pay-for-performance systems is not much easier for private-sector organizations, however. Baker, Jensen, and Murphy (1988) found that the highest-rated employees were only paid a few percentage points more than the lowest-rated employees. Lazear (2000) found a positive correlation only between compensation and time in service and/or hours worked—both objective, not performance-based, metrics.

Recommendations for more effective personnel systems are plentiful: Jamieson and O'Mara (1991) cited flexible rewards, incentive pay tied to both individual achievement and company profits, cash awards for patents and intrapreneurship, stock options, merchandise and travel incentives. Branham (2001) suggested retention bonuses, project bonuses, selective stock options, and higher pay for hard-to-fill positions. However, while the pursuit of more money is a socially acceptable reason for leaving an organization, Branham (2005) found that fewer than 12% of employees actually left for financial reasons. Gellerman (1992) nodded at money as an inducement, but stressed its general inefficiency as a motivator. Paraphrasing Maslowe ("Man does not live by bread alone, except when there is too little bread"), he argued that base pay is essential, but incentive pay motivates the extraordinary.

The DoD's current compensation conundrum seems custom-made for analysis via the principal-agent framework, which emanated from economic theory. In basic terms, principal-agent theory posits that the employee or contractor (the "agent") is rewarded for

² President Obama's Memorandum on Government Contracting (March 4, 2009) is available at http://www.whitehouse.gov/the_press_office/Memorandum-for-the-Heads-of-Executive-Departments-and-Agencies-Subject-Government/



acting in ways consistent with the best interests of the employer (the “principal”). If the agent’s needs are fulfilled, and the principal’s expectations are met, then the relationship will endure (Miller & Whitford, 2007). Miller and Whitford also identified a problem dubbed “the principal’s moral hazard constraint,” in which bonuses large enough to produce desired behaviors were cost-prohibitive for the principal. Consistent with much work in this area, I will focus on striking optimal contract(s) among players. Rather than advocate an “either-or” arrangement—i.e., either a behavior-based (base pay) or an outcome-based (incentive pay) contract—I acknowledge the complexity of contracts, both in the real-world sense and in the metaphorical sense. Contracts fall onto a continuum of arrangements, appropriately balancing risks and rewards over time. This lends itself to multiple theoretical lenses for analysis. For instance, studies contemplating risks and rewards associated with (fixed) salary versus (variable) commission packages (Eisenhardt, 1985; 1988; Conlon & Parks, 1988) have augmented principal-agent theory with institutional theory, which addresses the whole hierarchy of human needs. Duncan (2001) leveraged agency theory, alongside equity theory and reinforcement theory, to argue for broad-based incentive stock option plans, because they uphold ownership as a strong source of motivation. Likewise, Blair and Kruse (1999) heralded the rise of employees as an important shareholder group over the past 20 years, embracing employee stock ownership plans (ESOPs) and defined-contribution pension plans, such as 401(k) plans. Wilson (1994) advocated the sharing of rewards, as well, tied to collaboration and teamwork. In addition to the tangible rewards outlined above, compensation structures can also feature intangible or aspirational rewards. Promotional opportunities and career-path options, for example, are often offered along with fixed and variable pay.

Indeed, to create enduring work arrangements, one must not draw solely from economics (a la Hirsch, Michaels & Friedman, 1987). Social relationships are important, as well. Throughout this paper, I will explore embeddedness theory (Granovetter, 1985), which supports the notion of letting managers create a positive climate through pleasing others and generally doing the right thing, thereby serving as role models for the suppression of “force and fraud.” The workplace can provide both economic and social incentives for trustworthiness. Such acculturation is an ongoing process, created and calibrated through action in interpersonal networks.

The Blended Workforce

Bringing ever-more complexity to the stage, the phenomenon of the multi-sector, blended workforce has emerged. Contractors, civilians and military personnel are now found working shoulder to shoulder in pursuit of common goals. In a recent study by the Government Accountability Office (2009) of 66 large program offices throughout the DoD, some 37% of their acquisition workforce members were support contractors. Within the Missile Defense Agency and joint program offices, the percentage of contractors was higher: 49% and 47%, respectively. Certainly, from an everyday, operational standpoint, the delineations between “public” and “private” employment have blurred. To understand the nuances of managing in today’s complicated blend of mixed allegiances, I decided to conduct a two-part study, balancing the quantitative with the qualitative, and meshing economic with the sociological theory.



Review of the Literature

For decades, researchers—most notably those from the Bureau of Labor Statistics (BLS), charged with Federal Pay Comparability studies—have attempted to compare public and private-sector compensation. Results have been mixed; critiques of various methodologies have abounded. Many have portrayed comparisons of public and private-sector employees as unfair, given the vastly different missions at issue. Bozeman (1987) argued that because politics infiltrate nearly all organizational behaviors and processes, they are all “public” to some extent. While government and industry differ in their goals, they employ similar mechanisms (a generic set of management functions) in pursuit of those objectives. Allison (1980) concurred that management processes were basically alike, but that the importance of the means (i.e., functions) was eclipsed by the ends (i.e., different missions). Hinting at the “revolving door” phenomenon, Allison cited several high-profile executives³ who had performed both public- and private-sector jobs, sharing unanimous sentiment that public management was more difficult.

The difficulties of public management notwithstanding, many practitioners bemoan the relatively low compensation associated with public-sector work. The salary, *per se*, may not be the problem. In fact, Borjas (2002) found that male federal workers earned more than private-sector males with similar experience. The problem is the tight distribution of earnings among public-sector workers: Civil servants performing the roles of greatest responsibility do not earn substantially more than those in less-critical roles. Borjas (2002), Gibbs (2001), and Katz and Krueger (1991) all argued that the compressed distribution of earnings among those in the federal government (relative to the broader possibilities in the private sector) will likely hinder the government’s future ability to recruit and retain highly talented personnel. As many have pointed out, the best employees will always be underpaid; the mediocre will always be overpaid.

Quantitative Analysis: The Surveys

To better assess the DoD’s competitive position with respect to compensation, I collected recent salary data from three professional associations: The National Contract Management Association (NCMA), the Society for Cost Estimating and Analysis (SCEA), and the Project Management Institute (PMI). Members of these three organizations fall into the same general labor categories that commonly make up the DoD acquisition workforce. To normalize the salary and bonus data, I used Consumer Price Indices (CPI) from the BLS website.⁴ Although slight inflation is typically the norm, the purchasing power of \$1 actually increased marginally between 2008 and 2009, so the 2008 salary data are appropriately deflated.

NCMA Survey 2008

The NCMA produced a Salary Survey in 2008, and reported findings based upon usable responses from some 3,543 contracting professionals. Of this sample,

³ Allison named George Shultz, Donald Rumsfeld, Michael Blumenthal, Roy Ash, Lyman Hamilton, George Romney.

⁴ The Bureau of Labor Statistics inflation calculator is available at http://www.bls.gov/data/inflation_calculator.htm



approximately 56% were contractors to the federal government, 3% were employed by professional services firms, and 23% were federal employees. Nearly half (47%) worked for very large organizations with annual revenues or budgets exceeding \$501 million.

Of the NCMA sample, 86% had attained at least an undergraduate degree; 45% had earned a graduate degree as well. 42% indicated they currently held professional certifications, such as DAWIA Levels I through III (26%), Certified Professional Contracts Manager (11%), and Certified Federal Contracts Manager (5%). Approximately half reported holding some level of security clearance. More than two-thirds of the respondents resided on the East Coast or the West Coast, typically higher-cost areas. The top cities in terms of median reported salary were San Jose, San Francisco, Los Angeles, and Washington, DC.

As might be expected, salaries correlated positively with age, years of experience, educational level, clearances, professional certifications, and military experience. Interestingly, respondents from the very smallest companies (annual revenues or budget under \$1 million) and from the very largest organizations (over \$501 million) earned the highest median salaries. Of the sample, the typical (median-salaried) male reported a salary \$18,000 higher than the typical female's salary. This difference is likely attributable to differences in experience, education, organization size, and level of responsibility.

Of all of the independent variables, the NCMA researchers identified position as having the strongest relationship to salary. Specific positions reported most frequently were contract manager, supervisor, or director (31% total), and contract administrator or contract specialist (28%). 8% were contracting officers. No other job title was indicated by more than 4% of respondents. Lacking the complete NCMA dataset, the researcher made informed judgments on how titles mapped to the general job functions, reflected in Table 1.

Table 1. Salary by Job Function
(NCMA Salary Survey, 2008)

Job Function	Median Salary	Normalized to TY09\$	% in Function
Executive	\$ 152,000	\$ 151,459	4% \$ 6,058
Attorney	\$ 140,000	\$ 139,502	1% \$ 1,395
Manager	\$ 115,000	\$ 114,591	18% \$ 20,626
Consultant	\$ 112,000	\$ 111,602	3% \$ 3,348
Contract Mgr	\$ 108,000	\$ 107,616	15% \$ 16,142
Subcontract Mgr	\$ 104,000	\$ 103,630	15% \$ 15,544
Supervisor	\$ 99,800	\$ 99,445	16% \$ 15,911
Staff (Contract Admin.)	\$ 76,700	\$ 76,427	28% \$ 21,400
Weighted Average, All Functions (TY09\$)			\$ 100,425

In comparing median salaries of contractors to those of federal employees, pronounced differences were not found. Contractors reported salaries approximately 2% higher than those of federal government employees. Consultants (i.e., employees of professional services firms) earned considerably more; however, lacking complete data from the NCMA study, it was not clear whether these consultants were working with government or commercial clients.

Table 2. Salary by Type of Employer
(NCMA Salary Survey, 2008)



Employer	Percentage	Median Salary	Normalized to TY09\$
Contractor to Government	56%	\$ 92,000	\$ 91,673
Federal Government	23%	\$ 90,000	\$ 89,680
Consultant	3%	\$ 100,000	\$ 99,644
Weighted Average, Certain Employers (TY09\$)			\$ 91,405

Analyses of other elements of compensation packages revealed compelling differences. While nearly all respondents (96%) received some package of paid absences, 92% were offered healthcare assistance, 90% were entitled to participate in a 401K or similar plan, 88% were eligible for life insurance, 85% were provided with dental care assistance, 75% qualified for vision care assistance, and 70% were afforded tuition assistance; other valuable benefits were bestowed upon smaller segments of the sample. Only 35% were entitled to a pension plan, 30% (contractors, consultants, and commercial-business employees only) were offered ESOPs, and 64% were eligible for bonuses. For the respondents eligible to receive bonuses, the median bonus was \$3,500 (TY08\$). 24% reported a bonus of \$10,000 or more, 9% indicated a bonus of less than \$1,000, and 3% indicated none. Of respondents identified as executives (roughly 4% of the sample), the median bonus was \$25,000 (TY08\$). Bonuses by percentile are shown in Table 3.

Table 3. Bonuses for Contracting Professionals
(NCMA Salary Survey, 2008)

Bonuses (normalized to TY09\$)	
10th percentile	\$ 794
25th percentile	\$ 1,589
50th percentile	\$ 3,475
75th percentile	\$ 9,631
90th percentile	\$ 19,858
Executives	\$ 24,822

SCEA Survey 2005

The most recent salary survey from SCEA was conducted in 2005, and reflected usable responses from 405 professionals. Of this sample, approximately 78% were male and 22% were female. Geographical data were expressed in terms of SCEA chapter affiliations; because 25% of respondents did not identify a specific chapter, the prevalence of respondents' geographic locations could only be roughly estimated. Approximately 42% of SCEA respondents were linked to either East Coast or West Coast chapters (typically in higher-cost areas). Of the SCEA sample, 67% worked for private-sector companies and 30% were government employees. Of the government employees, 89% were civilians and 11% were active-duty military personnel; of the military personnel, 92% were Air Force and 8% were Navy. For the private-sector respondents, no breakouts were provided on type or size of company. Instead, breakouts of primary end products were given. The greatest number of participants (30%) worked aircraft, missile and spacecraft production. The next-largest category was research and consulting (24%), followed by electronics (11%), and intelligence/reconnaissance (7%).

SCEA respondents were highly educated: 97% had attained an undergraduate degree; 70% held a graduate degree as well. 36% indicated that they had earned SCEA's



professional certification. Again, salaries correlated positively with age, years of experience, and educational level. Of the sample, males generally reported significantly higher salaries than females, even within similar geographic areas and job functions. For example, among the 65% of all respondents identified as cost estimators, males earned 16.5% more than females. Disparities such as this are likely tied to differences in experience and responsibility levels: The typical (i.e., median) male respondent reported 19 years of experience, while the typical female reported 15 years. The males were slightly more likely to shoulder supervisory responsibilities as well.

Although the vast majority of SCEA participants were cost estimators, salary data were reported by several other types of professionals. Program managers and financial managers comprised 10% and 11% of the sample, respectively. Contracting and Earned Value Management (EVM) professionals reported the highest salaries, but collectively represented only 6% of the SCEA sample, as shown in Table 4.

Table 4. Salary by Job Function
(SCEA National Survey Results, 2005)

Job Function	Median Salary	Normalized to TY09\$	% in Function	% of Total Reporting Salaries	
Earned Value Management	\$ 114,000	\$ 125,229	3.00%	0.0326087	\$ 4,084
Contracting	\$ 108,000	\$ 118,638	3.00%	0.0326087	\$ 3,869
Program Management	\$ 100,000	\$ 109,850	10.00%	0.10869565	\$ 11,940
Financial Management	\$ 94,450	\$ 103,753	11.00%	0.11956522	\$ 12,405
Cost Estimating	\$ 92,030	\$ 101,095	65.00%	0.70652174	\$ 71,426
Accounting & Other	not reported	not reported	0.00%	-	\$ -
Weighted Average, All Functions (TY09\$)					\$103,723

Overall, as was the case with the NCMA survey, the median salaries of SCEA's private-sector employees were closely aligned with those of government employees, averaging about \$107,000 (TY09\$). Interestingly, though, with increasing levels of experience, salaries of public-sector professionals greatly surpassed those of private-sector employees, as shown in Table 5.

Table 5. Salary by Type of Employer and Years of Experience
(SCEA National Survey Results, 2005)

Employer & Experience Level	Percentage	<10 years	10 to 19 years	20 to 29 years	≥ 30 years	Median Experience Level = 17 years	Median Salary Normalized to TY09\$
Business	67%	\$ 71,500	\$ 98,000	\$ 98,000	\$ 95,000	\$ 98,000	\$ 107,653
Government	30%	\$ 75,000	\$ 97,000	\$ 106,000	\$ 108,000	\$ 97,000	\$ 106,554

Aside from base salary, the SCEA survey did not address any other aspects of compensation, such as bonuses and fringe benefits.

PMI Survey 2007

The Project Management Institute (PMI) released a salary survey in 2007, reflecting usable responses from some 1,143 professionals from the United States. Of the PMI sample, approximately 65% were male and 35% were female. Geographical data were not collected by specific location, but by type of locale. Nearly two-thirds of respondents (65%) worked in large cities, while roughly one-third (31%) worked in small to medium-sized cities;



the remaining 4% worked in rural areas. Of the PMI sample, 83% worked for private-sector companies; 9.5% were government employees; 7.5% were consultants. Nearly half (44%) of the respondents worked for very large organizations (i.e., more than 10,000 employees).

Of the PMI sample, 88% had attained at least an undergraduate degree; 44% possessed a graduate degree as well. 64% indicated that they held PMI's professional certification. As expected, salaries correlated positively with age, years of experience, level of education and certification. PMI also mapped salaries to project size, project team size, and project budget, both of which positively correlated with salary. Of the sample (65% male, 35% female), salaries for males were roughly 10% higher than those for females. PMI respondents, not surprisingly, were predominantly project and program managers. To ensure definitional consistency across the country, PMI detailed the functions for each title within the management hierarchy, and directed respondents to select the one most closely approximating their normal job duties, rather than reporting on a company-specific (or contract-specific) title currently held. For example, PMI (2007) distinguishes program manager from a project manager III as follows: A program manager coordinates multiple, interrelated projects in pursuit of a common operational objectives, while a top-level project manager oversees high-priority projects, involving extensive functional integration and considerable resources.

Table 6. Salary by Standardized Job Title
(PMI Salary Survey, 2007)

Job Title	Median Salary	Normalized to TY09\$	% in Role	
Chief Executive Officer	\$ 130,000	\$ 134,511	1%	1,295
Chief Information Officer	\$ 125,000	\$ 129,338	1%	1,471
Director of PMO	\$ 120,000	\$ 124,164	4%	5,323
Portfolio Manager	\$ 111,065	\$ 114,919	6%	6,535
Program Manager	\$ 105,500	\$ 109,161	22%	23,685
Consultant (Internal or External)	\$ 104,384	\$ 108,006	6%	6,709
Functional Manager	\$ 100,000	\$ 103,470	5%	4,888
Project Manager III	\$ 94,000	\$ 97,262	28%	26,975
Project Manager II	\$ 86,100	\$ 89,088	15%	13,172
Specialist (Scheduler, Cost Analyst)	\$ 84,500	\$ 87,432	4%	3,672
Project Manager I	\$ 82,750	\$ 85,622	8%	7,041
Weighted Average, All Jobs				\$100,766

Consistent with the preceding two surveys, PMI's median-base salaries differed only slightly across sectors. PMI collected salary data by industrial category; the categories typical of DoD contractors (information technology, aerospace, engineering, manufacturing, and telecommunications) are presented in Table 7. As was the case with the NCMA survey results, consulting firms appeared to pay most generously; however, it was not possible to tell whether the consultants were doing business with the government or with other private companies.

Table 7. Salary by Type of Employer
(PMI Salary Survey, 2007)



Types of Employer	Percentage of Sample of Interest		Salary	Normalized to TY09\$	
	Percentage	Interest			
Consulting	8%	14%	\$111,500	\$115,369	\$ 15,643
Aerospace	3%	5%	\$104,500	\$108,126	\$ 5,498
Telecommunications	6%	10%	\$101,000	\$104,505	\$ 10,628
Engineering	5%	8%	\$98,975	\$102,410	\$ 8,679
Government	10%	17%	\$98,000	\$101,401	\$ 17,187
Manufacturing	5%	8%	\$97,000	\$100,366	\$ 8,506
Information Technology	22%	37%	\$93,000	\$96,227	\$ 35,881
Weighted Average, Certain Employers (TY09\$)					\$ 102,021

Only on the aggregate level did the PMI survey address bonuses and other incentive pay. Since PMI defined “total compensation” as salary plus bonuses, Table 8 displays the delta between total compensation and base salary for all United States respondents; these figures reflect all sectors and all job titles. Because the mean figure can be distorted by outlying data (e.g., extremely high executive bonuses), the median (i.e., 50th percentile) figure will be used in subsequent comparisons.

Table 8. Bonuses for Project Management Professionals
(PMI Salary Survey, 2007)

Bonuses (normalized to TY09\$)	
25th percentile	\$ 4,656
50th percentile	\$ 7,295
75th percentile	\$ 13,192
Mean	\$ 11,035

Synthesis of Three Surveys

The PMI, SCEA and NCMA surveys were selected because they focused upon the exact types of employees desired for this study (i.e., program managers, cost estimators, and contract managers). As detailed in the preceding sections, the preponderance of participants in each of the respective surveys fell into those named categories. Summarized in Table 9 are the median base salaries (TY09\$), as reported for government organizations, consulting agencies, and the types of companies likely to be DoD contractors (e.g., aerospace, information technology, engineering, telecommunications, and manufacturing firms). Since only certain types of employers were deemed of interest within each sample, the percentage columns do not always add up to 100.

Table 9. Three-Survey Comparison of Base Salaries and Bonuses for Project Managers, Contracting Professionals, and Cost Estimators (TY09\$)
(PMI, 2007; SCEA, 2005; NCMA, 2008)

Type of Employer	PMI Survey		NCMA Survey		SCEA Survey	
	% of Sample	Med Salary	% of Sample	Med Salary	% of Sample	Med Salary
Contractor	41%	\$96,229	56%	\$91,673	67%	\$107,653
Government	10%	\$101,401	23%	\$89,680	30%	\$106,554
Consulting Firm	8%	\$115,369	3%	\$99,644	0%	
Median Bonus		\$7,295		\$3,475		n/a

Clearly, these figures cast doubt on the common perception that government employees are poorly compensated relative to their contractor counterparts. However, it



should be noted that, in each of the three samples, the percentage of contractor employees represented far exceeds that of government employees. It could be inferred that fewer government employees belong to professional organizations, or that few feel compelled to report their salary data, since federal civilian and military pay data are publicly accessible.

Moreover, more analysis is necessary to pinpoint compensation data on the *expertise levels* needed within each labor category to manage major defense acquisition programs (MDAPs). To provide a more focused comparison of the compensation of a DoD contractor to DoD government (both military and civilian) employees, at the levels customarily involved in managing MDAPs, the researcher constructed the chart in Table 10.



Table 10. Cross-Sector Comparison of Total Compensation for Employees Supporting Major Defense Acquisition Programs (TY09\$)

	Military	Civilian	Industry	Military	Civilian	Industry	Military	Civilian	Industry
	<i>Project</i>			<i>Program</i>			<i>Exec</i>		
	<i>O-4</i>	<i>GS-13</i>	<i>Manager</i>	<i>O-5</i>	<i>GS-14</i>	<i>Manager</i>	<i>O-6</i>	<i>GS-15</i>	<i>Director</i>
<i>Basic Pay</i>	78,408	96,469	94,048	82,248	113,998	106,489	87,480	134,094	131,219
<i>Bonus</i>	0	1,300	4,205	0	1,400	4,761	0	1,500	5,867
<i>Healthcare</i>	12,000	6,900	6,900	12,000	6,900	6,900	12,000	6,900	6,900
<i>Housing</i>	22,884	0	0	24,948	0	0	25,200	0	0
<i>Subsistence</i>	2,676	0	0	2,676	0	0	2,676	0	0
<i>Tax Savings</i>	6,390	0	0	6,906	0	0	6,969	0	0
<i>Retirement</i>	3,920	4,823	3,292	4,112	5,700	3,727	4,374	6,705	4,593
<i>Paid Absences</i>	8,444	12,295	8,114	9,031	14,529	9,187	9,606	17,090	11,321
<i>Total</i>	\$130,803	\$116,964	\$113,267	\$137,809	\$136,827	\$127,337	\$143,931	\$159,584	\$155,306

This chart captures the mix of acquisition personnel who typically support major DoD programs. Given the complexities inherent to the MDAP environment, it was assumed that contractor capabilities would be *at least* equivalent to a project manager II or III (in PMI terms); the interpolation of that salary aligns closely with the weighted average (\$94,048 in TY09\$) of median contractor salaries reported by the NCMA, SCEA, and PMI. Similarly, the median bonus mapped to an employee at that level reflects the weighted average (\$4,205) of bonuses reported by the NCMA and PMI. Within the MDAP framework, the second tier of contractor employee is equates to a program manager (in PMI terms). Since the median program manager salary was 13.23% higher than the project manager II/III salary, commensurate adjustments were made to the salary and bonus at second level. Similarly, the top tier of contractor employee aligns with an executive or a director (depending on the company). Since that salary was typically 23.22% higher than a program manager salary, appropriate adjustments were made to the contractor salary and bonus at the top level. Support for this methodology was obtained through a series of personal interviews with both contractors and civilians affiliated with MDAPs in early 2010; more details are provided in forthcoming sections.

For civilian salaries, all figures in Table 10 reflect base salaries at the midpoint of the grade level under consideration, augmented with the national average of 20.54% in locality pay.⁵ For the military pay computations, base salaries for officers with 14 years of experience were used.⁶ Military housing allowances⁷ for Minneapolis were chosen due to that metropolitan area's similar cost of living; it most closely approximates the national average with 20.36% in locality pay. The basic allowance for subsistence for all military officers is \$223 per month.⁸ Because DoD payments of housing allowances and subsistence are not taxable, military personnel save approximately 25% of that combined amount on income taxes each year, relative to their civilian and contractor counterparts.

⁵ Locality pay data (2009) are available at <http://www.opm.gov/oca/09tables/indexGS.asp>

⁶ Military pay tables (2009) are available at <http://www.dfas.mil/militarypay/militarypaytables/2009MilitaryPayTables.pdf>

⁷ Housing allowances (2009) are available at <http://www.defensetravel.dod.mil/perdiem/bah.html>

⁸ Basic allowance for subsistence is available at <http://militarypay.defense.gov/pay/bas/>



Valuation of non-monetary compensation involved making some assumptions. For example, healthcare is provided free of charge to military personnel and their dependents. Assuming the total premium cost plus medical care would average \$1,000 per month per family, the annual benefit to military families was assessed at \$12,000. While civilians and contractors generally receive assistance on healthcare premiums as well, the researcher assumed an out-of-pocket cost of \$2,600 per year for insurance premiums and \$2,500 per year for medical costs. Accordingly, the valuation of the contractor and civilian-employee benefit was \$6,900.

For matters concerning retirement benefits, there are endless variations on their valuation and administration. For the purposes of this analysis, however, a simple approach was used. For civilians and military personnel, the full potential agency contribution, equating to 5% of annual salary, was used. For industry employees, a notional company contribution of 3.5% was used.

Crisp calculations of the value of paid absences were stymied by the methods of accounting for such benefits. In the military model (a 24-hour, 7-day-per-week operational context), personnel are granted approximately 30 days off per year, but additional leave is sometimes authorized. On the other hand, additional duty days are often required. In this comparison, 25 days was chosen as representative of the leave utilized by military personnel. Active-duty personnel are also entitled to unlimited sick leave; for this comparison, three days of sick leave per year was assumed. For each of the three civilian grades, annual leave was valued at six hours per pay period (the level afforded to employees with fewer than 15 years of federal service).⁹ For the civilian grades, it was assumed that the average employee takes three days of sick leave annually. Finally, federal holidays added 10 days per year to the paid-absence total for civilian and military personnel. For paid absences in the private sector, a factor of 22 days per year (combined total of family/personal, sick leave, and federal holidays) was used.

Qualitative Analysis: The Interviews

To check the realism of these assumptions, while collecting qualitative data on the non-monetary factors that help retain high-quality personnel, I embarked upon more than 30 in-depth interviews with both public- and private-sector managers during the months of February and March 2010. My research study was publicized via LinkedIn.com, a career-oriented networking site,¹⁰ to several DoD-oriented groups, as well as through word of mouth to other colleagues. Targeted participants were managers with a minimum of 15 years of experience, working for at least two of the three types of employers (military, DoD civilian, or contractor). My interview questions were designed to capture both sides of the principal-agent relationship. After all, managers are familiar with both sides of that equation: They serve as principals on behalf of their organizations, but they perform as agents themselves.

Interviewees were given read-ahead material, so that the interviews could be conducted within a 45-minute timeframe, either face-to-face or via telephone. Given time

⁹ While most senior civilians have more than 15 years of service, it is probable that their program-office duties preclude the full use and enjoyment of leave benefits; accordingly, the figure used for comparison purposes was 6 hours per biweekly pay period (or 19.5 days per year) of annual leave.

¹⁰ See, for example, http://www.linkedin.com/groups?gid=67539&trk=myg_ugrp_ovr



constraints, I had to solicit input via e-mail in a few cases. Lacking a two-way mechanism for clarification and feedback in those exceptional cases, the questionnaires that were delivered via e-mail were reviewed thoroughly for consistency and realism. A few responses had to be discarded for reasons of inconsistency. While the interview questions were standard, they could be altered in order to fully explore the interviewees' knowledge areas. In very few situations, the focus remained on financial compensation; in most cases, the range of topics encompassed a host of other intangible inducements, including organizational culture.

The interviews took place in a variety of venues—in the cushioned alcoves of briskly percolating cafes, under the harsh lighting of 1940s-era government facilities, in modern high-rise offices, in the lobbies of posh hotels, behind the closed doors of unused conference rooms, and in quiet corners of company cafeterias. Due to my limited travel budget, however, just as many interviews were conducted via telephone—from my desk in northern Virginia, from telework centers, and from my kitchen table.

Compensation, I affirmed at the beginning of each interview, is a term that extends well beyond figures on a paycheck. Compensation can be understood as the complete package of rewards for work performed in support of an organization. The total package may include ESOPs, profit-sharing, bonuses, tuition assistance, rewards for improving credentials, subsidized childcare, transportation or food service, healthcare, retirement contributions, life insurance, housing, subsistence, travel, and relocation assistance, as well as flexible working arrangements (hours, location, job-sharing), home-office equipment, car allowances, and reinforcements such as event tickets, gift cards, and free coffee, soda and snacks (reminders that the organization is constantly paying you back for your hard work).

“Industry Pays More” ... Or Does It?

In the Washington metropolitan area, one manager stated, “Industry jobs are \$155K and up. With ‘tickets,’ you can command another \$20K. Since the DoD salary range is now around \$30K to \$155K, it simply cannot compete for people *who are after high salaries*.” Another manager corroborated this: “As a person with ‘tickets’ and certifications, I make \$175K per year.” One manager with visibility into salaries (both CONUS and OCONUS) stated that program manager salaries range from \$120K and \$150K, with clearances and professional certifications potentially adding \$5K to \$20K to the base salary. Yet another interviewee acknowledged that “top-level program managers make \$160-\$200K. Of course, higher-level positions pay much more, about \$300K and up.” A civilian manager with cognizance over contractors observed that “nearly all senior-level industry folks, with or without managerial duties, make more than \$100K here. The program managers I work with are pulling down \$160K to \$180K in base pay.”

While most interviewees applauded the pay flexibilities offered by industry, not all were able to secure high salaries initially. “When I retired (as an O-5) and interviewed with a DoD organization that used paybanding, they equated my rank to a GS-12 or 13. I made a sacrifice in terms of earning power to work within DoD, but I did not stay there.” Similarly, a former Army officer recalled questionable salary advice while transitioning. “My counselor recommended scaling back my pay expectations, but I knew that the only way to something close to the salary I wanted was to ask for it!” Other retirees mentioned trade-offs: “Since I didn’t need healthcare insurance, I traded those for a higher salary.” “When I moved to industry, there was more flexibility with salary, but I couldn’t negotiate more leave. The



company was very concerned about overhead rates, but high direct rates seemed to be okay.”

“Non-taxable benefits are a big draw to me now. When first I left the military, I was shocked to see a large portion of my paycheck being taxed away.” To attract contractors to support military operations in both hostile and non-hostile environments, one manager indicated that overseas employees were entitled to tax savings of \$28,000 from non-taxable compensation.

In industry, according to another manager, compensation is far more subjective. “I’ve seen salaries differing as much as 20% for people doing technically the same job. I’ve seen vice presidents with almost a 100% difference in salary for the same job—at these higher levels, it comes down to this person’s contribution to the overall mission. That’s hard to quantify because a lot of ‘soft’ assets—creativity, leadership and decision-making skills—come into play.” Another manager stressed that salaries for *good people* will be higher in industry than in government. “You get what you pay for. If you have the good fortune to be able to hire the best people, do it! You can accomplish just as much with one great person as other companies can do with two or three average people.”

Why, then, would a highly motivated performer want to work within the DoD? Most of the interviewees pointed to the intrinsic rewards. “When I retired, I first worked as a contractor. However, my leadership capabilities—those I had been refining throughout my entire military career—were just not used in that contractor role.” Other retirees concurred. “It’s very hard, after being a key decision-maker, to just be an advisor, subservient to inexperienced program-office personnel who can easily dismiss my opinion.” Another downside for military retirees joining private companies is that, in order to win business, they are often required to exploit relationships with people still working within the DoD. “The pressures that come with generating business are sometimes not worth the extra pay.”

Bonuses and Awards

Bonuses and awards, given their highly variable nature, are among the most interesting aspects of compensation. One manager related that he had held positions with four different contractors, but had rarely heard of five-figure bonuses. Another manager said that bonuses were relatively rare, but that everyone was eligible. “Our bonuses are based on percentage of Award Fee dollars earned. Our goal is to delight the customer, so our incentive is tied to that.” Other managers revealed that bonuses are not typical: “Only the people who have invested at least 10 years with the company are eligible for bonuses.” “No one gets bonuses unless they’ve been with the company for a very long time.” “In the companies I’ve worked with, the program manager did not get any special bonus.” “Only the most senior program managers get bonuses.”

Other companies employed very different practices with respect to bonuses. “We notify employees at the beginning of their performance-assessment cycle of their eligibility. To get the bonus, there’s a range of compensation and goals/objectives to meet. At the end of the cycle, feedback is provided, and a final payout decision is made.” Another manager affirmed that “everyone is eligible for some type of bonus, based on our sector’s profitability.” Still another stated, “Bonuses are based on project performance. Meeting revenue and profit marks set by upper management constitutes half of the bonus, while the other half is subjectively determined by the direct supervisor.” Another manager was pleasantly surprised: “I haven’t been with the company through the entire year, but I just received \$2,800—after just four months on the job.” Two other managers said, “Annual



bonuses are an expectation of all employees.” “Bonuses are a great retention tool, but have to be administered carefully.” One manager uses multifaceted bonus structure, based on customer satisfaction, business development, collateral duties, and participation in morale-building activities.

On the government side, civilian bonuses depend less on performance than on the size of the organization’s pay pools. “Under NSPS,” said one manager, “individuals could be rewarded more fully. However, to many of my senior folks, being recognized as a ‘five’ (top of the scale) is more important than money.” Another manager concurred: “Disappointments among my engineers tend not to center on the paltry bonuses, but on not being rated ‘outstanding.’ With limited bonuses to go around—and personnel rules tying the amount to the rating—not everyone can achieve that top rating.” Yet another civilian manager confirmed that the small bonuses are not enough to influence behavior: “We’re usually talking about 1% of salary here. The good part is that people know and understand this.” Military officers, on the other hand, can obtain special pay for specific job duties, but are not eligible for bonuses. Instead, officers are motivated by the potential of future promotions.

When asked about group bonuses to reward collaborative efforts, only one interviewee had been part of an organization that gave out group bonuses, and they represented a very small percentage of the overall compensation strategy. To encourage cohesiveness and teamwork, many of the managers bestowed non-monetary recognition upon groups, during periodic award ceremonies, through letters of recognition, and within the context of monthly project reviews.

Salary Reviews

When asked about the frequency and the impact of salary reviews, one civilian jokingly feigned confusion over the question. “I do what I do, and by all accounts I do it well. Nothing ever changes my salary—except cost of living adjustments.” Another civilian provided clarity: “Because DoD organizations have become fairly flat, many technical experts can only go so far.” Others concurred: “For military and civilians, performance reviews exist, but salary reviews really do not.”

Within industry, salaries are usually reviewed annually, or “upon negotiation for an increase.” Said one manager: “Most companies have an out-of-cycle process for unique situations that require immediate address.” Increases of 3% to 15% per year were reported, with the higher increases afforded to lower-salaried personnel. Sometimes, though, pay increases do not keep up with the cost of living. “This year, given economic concerns, our company elected to freeze all salaries over \$100K.” Another manager revealed, “Depending on the economy, we get a 3-5% pay bump. But anyone who’s been in this business awhile knows that the best way to increase your income is to play the mercenary role: Move over and move up! You don’t gain a whole lot in terms of earning potential by staying with the same company.” Others agreed: “Sometimes, the only way to boost compensation is to leave your current company for a higher bidder. Accordingly, industry employees often have a better sense of their market value. With that comes a drive to work harder and move forward.”

One manager pointed to an unintentional seniority disincentive. “If the average pay increase for 15 years was 2% per year, while salaries for new hires increased at 2.2% per year, eventually you will have new hires making more than the old timers, since prevailing rates were paid to lure new people, but only minor adjustments were made to keep the old.”



Such problems are solvable, given the flexibilities of contractor systems. One manager touted the opportunity to really look out for people, where appropriate. He has autonomy with salary decisions, but is also accountable for profits, losses, and customer satisfaction. “One time, an employee bargained for a 30% pay increase. He was working on a cost-plus contract. There’s no way I could ask the government to cover that, so I let him go and get that raise from another company.”

Another manager reported conducting salary reviews after just six months for exceptional new hires, but emphasized that “salary reviews, by themselves, are not good retention tools. Other things seem to matter a lot more.” Clearly, retention of talent is not contingent solely upon economics.

Other Aspects of Compensation: The Work Itself

Fueled by technological advances, workplaces have fundamentally changed over the past decade. Flexible working hours, mobile communication devices, and telework arrangements are largely taken for granted. As such, they no longer hold great motivational power. In 2010, the most frequently cited non-monetary forms of compensation centered upon aspects of *the work itself*. A civilian pointed to travel opportunities. “My projects are all over the country, so I’m rarely stuck in my office for more than a few weeks at a time.” Another nodded to his colleagues. “They are well educated and motivated. We don’t have to worry about back-stabbing from the inside! Sure, there are politics everywhere, but here we don’t tend to have ‘camps’ and ‘cliques,’ as I’ve witnessed when I spend time at my contractors’ facilities.” Other civilians concurred: “It’s definitely not Us versus Us. Friction might fester between Us and Outsiders (e.g., Congress and resource sponsors), but this helps bolster that sense of shared mission. It keeps us together.”

“My military career prepared me to move—had to go in, learn the ropes, and perform wherever I was sent. Two or three years later, I had to pack up and do it all again. To be successful, you needed agility of mind, and willingness to take on more responsibilities and manage risks.” These experiences primed her for senior positions, which she found in the private sector, but has since moved back to the DoD, where she feels she can directly improve the livelihoods of soldiers and sailors. Another retired officer emphasized intrinsic motivators. “After 20 years of leadership acculturation, I gravitate to positions where I am in charge.” Having worked as a support contractor, “I couldn’t stop program offices from making bad decisions. Now I can!” Another retiree who has worked across sectors cited satisfaction in teaming with other strong female civilians, as well as people from diverse socioeconomic backgrounds. “Opportunities for this are far greater within DoD than in the traditional white, male, upper-middleclass network found in industry.”

A civilian manager stated that “many of my senior folks hold patents and doctorate degrees. Accordingly, they command fairly high salaries, but that’s not why they work. They just love what they’re doing!” Similar sentiments came from another civilian manager, for whom money is not a big motivator. “I feel that I’m making a positive difference. Every morning I wake up energized to go to work and do great things!” As highly credentialed professionals move through their careers, money may become less important. A civilian manager mentioned cases in which senior systems engineers took \$50-70K pay cuts to come back to the DoD. “They wanted ‘quality of life’ things—respectful working environments and manageable workloads.”

Certainly, job satisfaction can be found outside of the DoD as well. One industry manager reminisced, “I’ve held jobs where I just loved the work—I was making a difference



in soldiers' lives, because I was right there, giving them the tools they needed." For another, "in taking the reins of a small company, I was trusted to make decisions without constraints. Somehow, the stockholders knew that I would do the right thing! My goals were simple—to grow the business and protect the employees from external shocks." A senior civilian agreed that "too many rules lead to managers becoming robotic—just going through the motions—people need some latitude to be creative problem solvers."

Managing the Blended Workforce: Different Norms, Different Expectations

When queried about the relative ease of managing civilians versus contractors, most interviewees stated that contractors could be relied upon to deliver results within the timeframe allocated. If managed astutely by a strong Contracting Officer's Representative (COR), the contractor will have firm deliverables, a well-defined scope, and established schedules. This is less common on the government side, where deliverable dates tend to be flexible, budgets are complex, scope is virtually unlimited, and schedules stretch for many years. One civilian offered that contractors "don't see the breadth of our responsibilities. Whereas a contractor might provide great support in a well-defined area, we are all over the place—steering diverse projects and programs—managing enormous amounts of money over long timelines." An industry manager offered that "DoD civilians face tremendous administrative hurdles in getting things done."

"There's definitely more motivation for contractors to perform," said a manager with experience on both sides. "That's due to a higher paycheck, supposedly. But I think there's more to it. There's more focus—and a greater sense of accountability." This could stem from less job security. "Industry projects are very time sensitive. Failure to make budget or meet deadlines usually translates to dismissal," said one manager. "If you screw up, you are history," said another. "We have to take calculated risks in order to make things happen," another industry manager said. "Out here, you've got to *produce*...and quickly...making decisions and meeting customer demands." Managers with experience on both sides agreed that there are many culture-driven expectations regarding employees' work habits. "Uncompensated overtime in industry is normal. I log about 10 extra hours per week, but that's just what I do as a professional." On the civilian side, "There's no expectation that anyone should work more than a 40-hour week. In the working-capital environment, the norm of working no more than 80 hours per two-week pay period was especially pronounced, because labor accounting there had to be a lot more precise."

A civilian shared a different perspective. "My Blackberry-equipped program managers are almost always on duty. I can send them a question any time of the night, and I'll have an answer within the hour." Although managers from both sides were quick to note DoD civilians who personified dedication and commitment, the general thinking was that "Civilian workers are a little bit too secure." "It's hard to fire them—there are no grave consequences when they mess up." "There's more acceptance of mediocrity." Disturbingly, one manager pointed to "few incentives for departing DoD experts to share knowledge with the junior folks, who are discouraged when they are not being challenged." Civilian time-in-service promotions are another irritant: "People can move all the way up to GS-13 without necessarily performing strongly." Two contractors expressed sadness over the repeal of NSPS. "Government managers really need a 'stick' to keep people productive. (They need better 'carrots,' too.)"



Broadly speaking, performance expectations for military personnel and industry workers were perceived as being higher than they are for civilians. These differences are driven by job-security issues (on the industry side), and the ability to gain promotions in rank (on the military side). Some observed that “the culture within industry is similar in some ways to active duty. You do whatever it takes to get the job done.” A civilian manager disagreed, citing no significant differences in terms of responsibility or organizational expectations. “As a program manager, I always had a counterpart on the industry side with similar duties and concerns. We understood one another and worked well together. Whenever our respective organizations had differences, we let the attorneys duke it out and we continued our collaborative engineering!”

“There are no problems with the blended workforce, as long as there’s good leadership.” A civilian manager agreed: “People are people—we should adopt a ‘colorless badge’ ethic.” An industry manager confirmed that “values are embedded in people, regardless of where they work. That’s what the DoD customer is really buying—great people, strong ethics, professional judgment. Of course, there are lines that cannot be crossed. We develop products for decision-makers to use—Independent Cost Estimates, Acquisition Plans, Performance Work Statements, etc.—but we cannot support a program that our company might eventually bid on.”

Hiring, Firing and Everything in Between

“No rational private company would institute a personnel system like ours,” confessed one civilian manager. Most DoD organizations have a fixed number of billets, and cannot initiate *ad hoc* hiring actions. Processes must be followed; attritions are not automatically backfilled. Another manager admitted, “when I worked in the private sector, I appreciated the speed and smoothness with which human resources functions were carried out.”

Several retired officers were repelled by the application process for DoD jobs. “So much documentation, so many narratives on knowledge, skills and abilities (KSAs)—who actually reads this stuff?” When applying for DoD jobs, “you upload documents to a ‘black hole’ of a database, and don’t hear anything for months! I considered DoD when I retired, but I have to put bread on the table. I can’t wait six months for a call.” Radically different stories came from this industry side: “All I did was post my resume on the NCMA website, and within days, I had 20 potential interviews. The first inquiry came within hours!”

“We have lots of flexibility to recruit and retain...without a lot of hassle,” said one manager. With this discretionary power, though, comes perceptions of reduced transparency. Another manager stressed, “We seem to have few standards on years of experience needed, or the value of degrees and certifications. It’s very subjective, and when employees ask what they need to do in order to get promoted, I cannot offer much guidance, except to keep performing!”

“On firing, our rules are obviously looser than DoD’s. As a director, I could fire for cause (e.g., harassment) or for non-performance. I could fire any of my direct reports *on the spot* for serious infractions (e.g., assault).” As chronicled in the preceding section, many managers are concerned over difficulties in terminating non-performing civilians. “Deadwood does exist,” stated one. “Non-performers get shuffled around, but only rarely do we find a better fit that fixes the performance problem.” “Unfortunately, the lack of productivity from poor performers puts more pressure on the civilians who do try to make things work,” a civilian explained. “This can lead to frustration and the exodus of good employees.”



Other examples of inflexible rules emerge when DoD civilians obtain attractive offers from other DoD organizations: The employing organization cannot respond. “It’s hard to keep my best folks from being lured away,” said a senior manager. “I must recruit very strategically, targeting, for instance, talent made available up by a Base Realignment and Closure (BRAC).”

Proactive succession planning is also critical. “We mentor *all* GS-14s and GS-15s,” said a civilian manager. “That way, no one feels singled out or neglected. These are our senior folks—the ones next in line to lead. Whether or not they get that promotion, they’re the ones running departments and divisions now, so they need to stay energized.” Mentoring younger workers is also key. “With Generation Y, the ‘thou shalt stay’ mentality is counterproductive. We need to engage in enterprise-level thinking. Every person needs to find the best environment in which to use their skills. For some, it’s within DoD; for others, it’s with a DoD contractor. By taking this broader view, we can encourage young people to find their own way, without stifling growth and confining them to stovepiped organizations.”

Compensation, Culture and Contracts: Conclusion

This study was conducted in two phases, which sometimes overlapped and required additional iterations. While the first phase involved gathering, normalizing and organizing the quantitative data, the second was aimed at gaining a richer understanding of the data via qualitative interviews with highly experienced managers. My goal was to produce a balanced view of compensation practices, situated within particular organizational cultures, thereby infusing principal-agent theory with embeddedness theory. From a sheer economic perspective, the compensation packages of DoD employees compare favorably with those of contractor employees. However, flexibilities in contractor personnel systems open up possibilities for much higher earnings if an employee is willing to work hard, take risks, and deliver results. From a more sociological perspective, retention of employees is aided by a positive, mission-focused culture, which can be created and sustained both in contractor and DoD organizations provided that strong, effective leaders are present. In conclusion, to motivate strong performance, organizations have a variety of tools from which to choose. These tools transcend base salary to encompass a shared sense of purpose, positive morale, leadership development, mentoring, and fresh ways of thinking about career progressions. When reinstituting the GS system, the DoD should fully leverage the management flexibilities and workforce incentives (toward these ends), as authorized by Congress.

References

- Allison, G. (1979, November 19-20). Public and private management: Are they fundamentally alike in all unimportant respects? In *Proceedings of the Public Management Research Conference* (pp. 27-38); (1980, February). OPM Document 127-53-1. Washington, DC.
- Allison, G., & Szanton, P. (1976). *Remaking foreign policy: The organizational connection*. New York: Basic Books.
- Asch, B. (2005). The economic complexities of incentive reforms. In Klitgaard & Light (Eds.), *High-performance government: Structures, leadership, incentives* (pp. 309-342). Santa Monica: RAND.



- Baker, G., Jensen, M., & Murphy, K. (1988). Compensation and incentives: Practice vs. theory. *Journal of Finance*, 43, 593–616.
- Blair, M.M., & Kruse, D.L. (1999, fall). Worker capitalists? Giving employees an ownership stake. *Brookings Review*, 17.
- Borjas, G. (2002, October). *The wage structure and the sorting of workers into the public sector* (Working Paper 9313). Cambridge, MA: National Bureau of Economic Research.
- Bozeman, B. (1987). *All organizations are public*. Jossey-Bass.
- Branham, L. (2001). *Keeping the people who keep you in business*. New York: American Management Association.
- Branham, L. (2005). *The seven hidden reasons employees leave*. New York: American Management Association.
- Defense Finance and Accounting Service. (2009). *Military pay tables*. Retrieved from <http://www.dfas.mil/militarypay/militarypaytables/2009MilitaryPayTables.pdf>
- Eisenhardt, K.M. (1989, January). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
- GAO. (2009). *Additional data and actions are needed to effectively manage and oversee DoD's acquisition workforce*. Retrieved from <http://www.gao.gov/new.items/d09342.pdf>
- Gellerman, S.W. (1992). *Motivation in the real world*. New York: Penguin Group.
- Gibbs, M. (2001). *Pay competitiveness and quality of Department of Defense scientists and engineers* (MR-1312-OSD). Santa Monica, CA: RAND.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3), 481-510.
- Hedgpeth, D. (2009). Pentagon to expand its acquisition force. *Washington Post*. Retrieved from http://voices.washingtonpost.com/government-inc/2009/04/pentagon_to_expand_its_acquisi.html
- Hirsch, P., Michaels, S., & Friedman, R. (1987). 'Dirty hands' v. clean models: Is sociology in danger of being seduced by economics? *Theory and Society*, 317-336.
- Holmstrom, B., & Milgrom, P. (1991, January). Multitask principal-agent analyses: Incentive contracts, asset ownership and job design. *Journal of Law, Economics and Organization*, 7(Special Issue: Papers from the Conference on the New Science of Organization), 24-52.
- James, K.C. (2002). *A fresh start for federal pay: The case for modernization*. White Paper. Washington, DC: US Office of Personnel Management.
- Jamieson, D., & O'Mara, J. (1991). *Managing workforce 2000: Gaining the diversity advantage*. San Francisco: Jossey-Bass.
- Katz, L., & Krueger, A. (1991). *Changes in the structure of wages in the public and private sectors* (Working Paper No. 2667). New York: National Bureau of Economic Research.



- Lazear, E.P. (2000). Performance pay and productivity. *American Economic Review*, 90(5), 1346–1361.
- Lee, S., & Whitford, A. (2008). Exit, voice, loyalty and pay: Evidence from the public workforce. *Journal of Public Administration Research and Theory*, 18(4), 647-671
- Miller, G., & Whitford, A. (2007). The principal's moral hazard: Constraints on the use of incentives in hierarchy. *Journal of Public Administration Research and Theory*, 17(2), 213-233.
- Roberts, N.C. (1991). *Limitations of strategic management in bureaus: The case of the Department of Defense* (Working Paper). Naval Postgraduate School. Retrieved from <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA236803&Location=U2&doc=GetTRDoc.pdf>
- US Congress. (2004). *National defense authorization act* (P.L. 108–136). Retrieved from <http://www.dod.mil/dodgc/olc/docs/2004NDAA.pdf>
- US Congress. (2010). *National defense authorization act for 2010* (P.L. 111-84). Retrieved from http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h2647enr.txt.pdf
- US Office of Personnel Management. (1998, August). *HRM Policies and Practices in Title-5 Exempt Organizations* (MSE-98-4). Washington, DC: Office of Merit Systems Oversight and Effectiveness.
- US Office of Personnel Management. (2001, July). Human resources flexibilities and authorities in the federal government. Washington, DC: Office of Merit Systems Effectiveness, Center for HR Innovation.
- US Office of Policy and Evaluation, Merit Systems Protection Board. (2001, December). *The federal merit promotion program: Process vs. outcome*. Washington, DC: US GPO.
- Wilson, T.B. (1994). *Innovative reward systems for the changing workplace*. New York: McGraw-Hill.



THIS PAGE INTENTIONALLY LEFT BLANK



2003 - 2010 Sponsored Research Topics

Acquisition Management

- Acquiring Combat Capability via Public-Private Partnerships (PPPs)
- BCA: Contractor vs. Organic Growth
- Defense Industry Consolidation
- EU-US Defense Industrial Relationships
- Knowledge Value Added (KVA) + Real Options (RO) Applied to Shipyard Planning Processes
- Managing the Services Supply Chain
- MOSA Contracting Implications
- Portfolio Optimization via KVA + RO
- Private Military Sector
- Software Requirements for OA
- Spiral Development
- Strategy for Defense Acquisition Research
- The Software, Hardware Asset Reuse Enterprise (SHARE) repository

Contract Management

- Commodity Sourcing Strategies
- Contracting Government Procurement Functions
- Contractors in 21st-century Combat Zone
- Joint Contingency Contracting
- Model for Optimizing Contingency Contracting, Planning and Execution
- Navy Contract Writing Guide
- Past Performance in Source Selection
- Strategic Contingency Contracting
- Transforming DoD Contract Closeout
- USAF Energy Savings Performance Contracts
- USAF IT Commodity Council
- USMC Contingency Contracting

Financial Management

- Acquisitions via Leasing: MPS case
- Budget Scoring
- Budgeting for Capabilities-based Planning



- Capital Budgeting for the DoD
- Energy Saving Contracts/DoD Mobile Assets
- Financing DoD Budget via PPPs
- Lessons from Private Sector Capital Budgeting for DoD Acquisition Budgeting Reform
- PPPs and Government Financing
- ROI of Information Warfare Systems
- Special Termination Liability in MDAPs
- Strategic Sourcing
- Transaction Cost Economics (TCE) to Improve Cost Estimates

Human Resources

- Indefinite Reenlistment
- Individual Augmentation
- Learning Management Systems
- Moral Conduct Waivers and First-term Attrition
- Retention
- The Navy's Selective Reenlistment Bonus (SRB) Management System
- Tuition Assistance

Logistics Management

- Analysis of LAV Depot Maintenance
- Army LOG MOD
- ASDS Product Support Analysis
- Cold-chain Logistics
- Contractors Supporting Military Operations
- Diffusion/Variability on Vendor Performance Evaluation
- Evolutionary Acquisition
- Lean Six Sigma to Reduce Costs and Improve Readiness
- Naval Aviation Maintenance and Process Improvement (2)
- Optimizing CIWS Lifecycle Support (LCS)
- Outsourcing the Pearl Harbor MK-48 Intermediate Maintenance Activity
- Pallet Management System
- PBL (4)
- Privatization-NOSL/NAWCI
- RFID (6)



- Risk Analysis for Performance-based Logistics
- R-TOC AEGIS Microwave Power Tubes
- Sense-and-Respond Logistics Network
- Strategic Sourcing

Program Management

- Building Collaborative Capacity
- Business Process Reengineering (BPR) for LCS Mission Module Acquisition
- Collaborative IT Tools Leveraging Competence
- Contractor vs. Organic Support
- Knowledge, Responsibilities and Decision Rights in MDAPs
- KVA Applied to AEGIS and SSDS
- Managing the Service Supply Chain
- Measuring Uncertainty in Earned Value
- Organizational Modeling and Simulation
- Public-Private Partnership
- Terminating Your Own Program
- Utilizing Collaborative and Three-dimensional Imaging Technology

A complete listing and electronic copies of published research are available on our website:
www.acquisitionresearch.org



THIS PAGE INTENTIONALLY LEFT BLANK





ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL
555 DYER ROAD, INGERSOLL HALL
MONTEREY, CALIFORNIA 93943

www.acquisitionresearch.org



Acquisition Research Program:
Creating Synergy for Informed Change

Compensation, Culture & Contracts: The Blended DoD Acquisition Workforce

Kathlyn H. Loudin, Ph.D. Candidate, Virginia Tech
Professor of Business, Defense Acquisition University

DoD's Acquisition Workforce: A Rich Blend of Mixed Allegiances

GAO (2009) study of 66 large program offices

Overall: 37% were support contractors

Missile Defense Agency: 49% were contractors

Joint programs: 47% were contractors

Navy: 40% were contractors

Air Force: 30% were contractors

Army: 22% were contractors



DoD's Acquisition Workforce Paradox

Compensation System in Flux...but HIRE!

- **FY04 NDAA** – amended Title 5 to allow pay-for-performance system, NSPS, to replace GS system.
- **FY10 NDAA** - further amended Title 5, rolling back NSPS & reinstituting GS system with better incentives and flexibilities.
- Hire / Convert 20,000 Acquisition Workers !
- Secretary Gates' goal: By FY 2015, *add* 20,000 civilian billets...
- 11,000 converted from contractor positions
- 9,000 new positions

Great opportunity to get things right!



Research Agenda: Balanced Approach

Quantitative

- Meta-analysis of three ***large salary surveys***, coupled with interview data (Jan-March 2010).
- Focused on acquisition-oriented labor categories (project managers, contract administrators, Earned Value analysts, cost estimators).

Qualitative

- In-depth interviews with **33 *acquisition managers*** with minimum 15 total years of experience working for at least two types of employers: military, civilian, contractor (February-April 2010)



Research Question #1: Is DoD really at a competitive disadvantage with respect to financial compensation?

Salaries and Bonuses for Project Managers, Contract Managers & Cost Estimators (TY09\$)

Type of Employer	PMI Survey		NCMA Survey		SCEA Survey	
	% of Sample	Med Salary	% of Sample	Med Salary	% of Sample	Med Salary
Contractor	41%	\$96,229	56%	\$91,673	67%	\$107,653
Government	10%	\$101,401	23%	\$89,680	30%	\$106,554
Consulting Firm	8%	\$115,369	3%	\$99,644	0%	
Median Bonus		\$7,295		\$3,475	n/a	

Sources: SCEA (2005), NCMA (2008), PMI (2007)

DoD salaries compare favorably overall...but, how representative are these self-selected samples?



Total Compensation: Cross-Sector Comparison

	Military	Civilian	Industry	Military	Civilian	Industry	Military	Civilian	Industry
	<i>Project</i>			<i>Program</i>			<i>Exec</i>		
	<i>O-4</i>	<i>GS-13</i>	<i>Manager</i>	<i>O-5</i>	<i>GS-14</i>	<i>Manager</i>	<i>O-6</i>	<i>GS-15</i>	<i>Director</i>
<i>Basic Pay</i>	78,408	96,469	94,048	82,248	113,998	106,489	87,480	134,094	131,219
<i>Bonus</i>	0	1,300	4,205	0	1,400	4,761	0	1,500	5,867
<i>Healthcare</i>	12,000	6,900	6,900	12,000	6,900	6,900	12,000	6,900	6,900
<i>Housing</i>	22,884	0	0	24,948	0	0	25,200	0	0
<i>Subsistence</i>	2,676	0	0	2,676	0	0	2,676	0	0
<i>Tax Savings</i>	6,390	0	0	6,906	0	0	6,969	0	0
<i>Retirement</i>	3,920	4,823	3,292	4,112	5,700	3,727	4,374	6,705	4,593
<i>Paid Absences</i>	8,444	12,295	8,114	9,031	14,529	9,187	9,606	17,090	11,321
<i>Total</i>	\$130,803	\$116,964	\$113,267	\$137,809	\$136,827	\$127,337	\$143,931	\$159,584	\$155,306

Note: Reflective of FY09 rates, plus 20.54% locality pay

...but, at the most senior levels, DoD lags in flexibility and possibly competitiveness.



Research Question #2: Given that salaries appear competitive, what things retain top employees?

- Rewards for strong performance
- Ability to exert positive influence
- Productive environment (customer)
- Interpersonal dimension (no internal strife)
- Truly meaningful performance reviews
- Security – but not complacency
- Moving up – a real career ladder



The Interview Questions: Areas of Interest

Objective / Financial

- Base Salary
- Flexible Pay
- Bonus Pools
- Retirement Plans
- ESOPs
- Profit-Sharing
- Healthcare Insurance
- Other Benefits

Persuasive/ Intangible

- Culture
- Security
- Autonomy
- Customers
- Training Initiatives
- Travel Opportunities
- Positional Authority
- Social Rewards



Base Salary

- Industry has flexibility to hire and retain high-performing people who desire high salaries.
- DoD pay systems are compressed and tend to be rigid and rule-bound.
- DoD does not permit payment of “efficiency wage” *at point of need*; best agents may leave.

Principal-Agent Theory



Incentive Pay & Bonuses

- Industry offers on-the-spot awards, bonuses, commissions, ESOPs, and profit-sharing.
- Marginal impact of bonus pay for DoD workers is not enough to change behavior.

Principal-Agent Theory

- Information Asymmetry – reduced with sense of shared ownership.



Retirement Plans and Other Benefits

- Industry benefits are becoming less generous overall (margin pressures).
- DoD civilian benefits are adequate, but tend not to impact day-to-day behavior.
- Military benefits are extraordinarily generous, serving to motivate senior-level personnel.



**Retirement Plans and
Other Benefits**

- Vesting Requirements
- Military Retirement Rules
- Healthcare Needs

**Principal-Agent
Theory**

- Desired benefits may induce loyalty to current employer; however, every individual has different needs.



Work Culture & Customers

- Industry tends to have more factions, driven by competitive zeal. Tasking is more focused; roles are better defined. Customer relationship is key.
- DoD is often more cohesive (in terms of mission), but work culture is more impersonal. Responsibilities are broad and sometimes hard to ascertain.

Principal-Agent Theory

- Information Asymmetry (especially adverse selection) increases with competitive pressures.



Security

- Industry – staffing size driven by business base; job security moderate to low.
- DoD – jobs sometimes seen as “too secure”

Principal-Agent Theory

- Negative incentives (“fear of firing”) can sometimes motivate positive behavior.
- Information Asymmetry – increased during times of distress (need to survive).



Autonomy & Positional Authority

- Within industry, authority and autonomy may exist within own firm, but is contingent upon customer relationships.
- Within DoD, autonomy is relatively higher; positional authority much higher (interorganizational arena).

Principal-Agent Theory

- Dilulio: At certain points, self-sacrifice becomes rational. Intense “call to duty” defies rational choice theory.



Recommendations:

Reinstitute the GS system, but with...

Flexibility to hire at various levels (not just entry level)

Authority to do out-of-cycle salary ***adjustments*** (if needed)

Requirement for ***meaningful performance reviews***
and career discussions.

Ongoing ***mentoring*** and ***strategic recruitment***.

Firm requirements (experience and demonstrated knowledge)
for progressions in grade.

Conscious effort to promote ***mission-focused culture***.



Culture: Government vs. Industry

Government

- Constitutional oath
- Stewards of tax dollars
- Best for the country
- Due process
- Staff size funded and capped
- Grow leaders
- Pay equitably and hope for good results

Industry

- Dog eat dog
- *Profitus maximus*
- Best for the company
- At-will employment
- Staff size driven by revenue
- Hire leaders
- Pay flexibly and demand good results



Culture: Government vs. Industry

Government

- Big-picture view
- Call the shots
- Authority
- Chain of command

- Goodness measured via mission accomplishment, cost and schedule control

Industry

- Contract & project view
- Do the work
- Influence
- Matrix management

- Goodness measured in terms of revenue, profit, and follow-on work



Selected References

- Barnard, Chester I. (1938). *The Functions of the Executive*. Cambridge, Mass.: Harvard University Press.
- Dilulio, John D., Jr. (1994). Principled Agents: The Cultural Bases of Behavior in Federal Government. *Journal of Public Administration Research and Theory*, Vol. 4, No. 3.
- Government Accountability Office. (2009). Additional data and actions are needed to effectively manage and oversee DoD's acquisition workforce

<http://www.gao.gov/new.items/d09342.pdf>



Acronyms

DoD = Department of Defense

ESOP = Employee Stock Ownership Plan

